

Steel grade

Material No. / Werkstoff-Nr.	PREMIUM 1.2294
Description	~X5CrS12
AISI/SAE	1.2294
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Specifications



Precision flat steel with machining allowance [PFS/BA]
L: 500 mm



€co-Präz* [€co]
L: 500 mm



Precision round steel with machining allowance [PRS/BA]
peeled / rough-turned
L: 500 mm
L: 1.000 mm

Chemical composition AISI/SAE 1.2294 (reference value %) + additives

C	Mn	S	Cr
0,05 - 0,05	1,3 - 1,3	0,15 - 0,15	12,5 - 12,5

Physical properties

Hardness (delivery condition)	max. 330 HB, tempered						
Tensile strength R_m (as received condition)	approx. 1.125 N/mm ²						
Working hardness	max. 35 HRC						
Thermal expansion coefficient $10^{-6}m/(m \cdot K)$	20 - 100°C	20 - 200°C	20 - 300°C	20 - 350°C	20 - 400°C	20 - 450°C	20 - 500°C
	10,3	10,9	11,2	11,4	11,6	11,8	12,0
Thermal conductivity $W/(m \cdot K)$	23°C	150°C	300°C	350°C	400°C	500°C	
	24,6	25,7	25,8	25,7	25,4	24,7	

Technical properties

Pre-hardened, corrosion resistant plastic mould steel. Magnetisable, excellent machinability and good weldability. Resistant to aggressive plastics and humid conditions. Further heat treatment is not intended.

Applications

Mechanical engineering, apparatus engineering, plastic processing, injection tools, base plates, assembling parts, moulding frames, plastic moulds, extrusion tools, valves, steam valves, water valves, fittings parts, pump construction, pump rods, compressor construction, compressor parts, surgical instruments.

